

Health Insurance and Health Care Utilization in Wisconsin

As one of 20 states that received a grant from the Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services, Wisconsin is exploring new ways to increase health insurance access for its residents. Research under Wisconsin's State Planning Grant (SPG) has focused on understanding the particular circumstances of Wisconsin residents in gaining access to health insurance coverage.

This paper describes analyses about the relationship between health insurance and the utilization of health care by Wisconsin residents. The presence or absence of health insurance is one of several factors that influence health care utilization. Thus, the analyses describe the relationship between insurance and utilization within the context of other individual and family characteristics, such as health status and income, that could affect utilization.

This paper summarizes research conducted at the Institute for Research on Poverty, University of Wisconsin-Madison, using 1998 and 1999 Wisconsin Family Health Survey (FHS) data.

Health Care Utilization: An Overview

Four measures of health care utilization are used in this analysis: visits to a physician, registered nurse, or physician assistant in the last year; scheduled health check-ups in the last year; dental visits in the last year; and having a usual source of medical care. Overall rates of health care utilization differed substantially across the four measures. Whereas 96 percent of Wisconsin residents were reported as having a usual source of care, 84 percent visited a provider in the last year, 60 percent had a scheduled check-up and 72 percent visited a dentist.

Table 1 shows the percentages of Wisconsin residents for each utilization measure, tabulated by insurance coverage over the past year. The results suggest a relationship between health insurance coverage and health care utilization. Compared to those who were insured all year, those who were uninsured all year (see "None" column) were less likely to visit a physician or a dentist, have had a check-up, or have a usual source of care. Compared to those insured all year, those insured part of the year were no less likely to have seen a physician, only slightly less likely to have had a scheduled check-up or have a usual source of care, but much less likely to have visited a dentist.

Table 1. Utilization of Health Care by Insurance Status, Wisconsin, 1998 and 1999

	Insurance Coverage		
	None	Part year	All year
% Visiting a Doctor, RN or PA in the Last Year	63.9	85.2	85.5
% Having a Check-Up in the Last Year	37.6	56.6	63.9
% Visiting a Dentist in the Last Year	45.4	57.3	76.3
% Having a Usual Source of Care	78.7	91.3	97.3

Source: 1998-1999 Family Health Survey, Wisconsin Department of Health and Family Services

Factors Affecting Health Care Utilization

Does the presence or absence of health insurance influence the utilization of health care? Table 1 shows that utilization rates vary with insurance coverage. However, other factors besides insurance coverage can have an effect on health

care utilization. Further analysis of the insurance-utilization relationship included controls for the effects of other factors that are related to use of health care services: age, gender, race, education, household structure, residential location, poverty status, and health status.

“Controlling for” the effects of other factors means that their effects are held constant while each individual factor is analyzed. For example, older people are more likely to use health care services than younger people. Analysis of the relationship between insurance and use of health care services, controlling for age, would indicate whether insurance has an effect on utilization that is independent of age.

Results indicate that the following factors were statistically significant, when controlling for the effects of the other factors listed above:

Insurance status. People with no insurance coverage in the preceding year were significantly less likely to have a doctor visit, a dental visit, a scheduled check-up, or have had a usual source of care, compared to those with insurance for the entire preceding year, after controlling for other factors. In fact, they were only about one-fourth as likely to have visited a doctor, three-tenths as likely to have had a check-up, and one-sixth as likely to have visited a dentist. Those with insurance coverage for part of the preceding year were no less likely to have visited a doctor than those with coverage for the whole year. However, they were significantly less likely to have visited a dentist, had a check-up, or had a usual source of health care.

Age. Compared to children aged 6-17, children under 6 were nearly 11 times more likely to have visited a doctor and 9 times more likely to have had a check-up. Children aged 6-17 were less likely to have had any type of medical care than were working aged adults. Controlling for other differences, the elderly were no less likely to have visited a doctor or had a check-up but were less likely to report a dental visit than children ages 6-17.

Gender. Men were significantly less likely than women to engage in all forms of utilization, holding other factors constant. Men were only about 41 percent as likely as women to have visited a doctor and only about 23 percent as likely as women to have a usual source of care, holding other factors constant.

Race. African Americans were no more likely to have visited a doctor or have a usual source of health care than were whites. African Americans were more likely to have visited a dentist or had a scheduled check-up than were whites, holding other factors constant.

Education. Education operates generally as might be expected. Controlling for other factors, households in which the respondents were without a high school diploma were less likely to have visited a doctor or a dentist or have a usual source of health care than households with a respondent who had a college degree. Residents of households whose respondent did not have a high school diploma were only about one-quarter as likely to have visited a dentist as residents of households whose respondent had a college degree.

Household structure. Those residing in households composed of a single parent with children were about as likely to have visited a doctor, had a checkup, or visited a dentist, as were those in married couple households with children, holding other factors constant. Controlling for age and other factors, single people without children were less likely to have a doctor or dental visit, or a checkup, compared to persons in married couple households with children.

Residential location. Those who lived on farms were significantly less likely to have visited a doctor; their odds of doing so were about 74 percent of those who did not live on a farm, controlling for other differences. The other measures of utilization were not significantly different between those who did and did not live on farms.

Residents of Milwaukee County were less likely to have visited a dentist or to have a usual source of care, but more likely to have visited a doctor, than were residents of other metropolitan counties.

Poverty status. Controlling for other measured differences, those with incomes below 100% of the federal poverty level were no less likely to have visited a doctor or had a check-up than those with incomes more than twice the poverty level. Poor people were less likely to have visited a dentist, compared to persons with incomes more than twice poverty.

Those with incomes between 100 and 200 percent of poverty fared worst on three measures of utilization. Controlling for other factors, they were

significantly less likely to have visited a doctor, have had a check-up, or visited a dentist than were those with incomes more than twice poverty.

Health condition. Holding other differences constant, those with indications of poor health (i.e., those who reported “fair” or “poor” health

status, or reported a limiting or chronic condition), were more likely to have visited a doctor and to have had a checkup, compared to those with “good”, “very good” or “excellent” health. Those in poor health were about as likely to have visited a dentist or had a usual source of care as those who were in good to excellent health.

Summary

A relationship between health insurance and use of health services persists, even when controlling for other factors, such as age and poverty status. Having insurance coverage for a full year increases the likelihood that people will have seen a doctor, had a check-up, visited a dentist in the last year, and have had a usual source of health care. Education, residential location (that is, living on a farm or in metropolitan or non- metropolitan counties), age, and gender also have independent, statistically significant effects on utilization.

Levels of utilization differ among the various utilization measures. Except for those without insurance, most people had a usual source of

health care. However, the extent to which they reported check-ups and dental visits varied by age, education, household structure, and poverty level.

Differences between those with full and part-year coverage are less dramatic, but still matter. Those with health insurance for only part of the year were about as likely to have seen a doctor as those with insurance for the full year. Those with insurance for only part of the previous year and those with no insurance in the preceding year were significantly less likely than those with insurance for the full year to obtain dental care and routine check-ups.

About the Data

This briefing paper is a summary of the report “Health Insurance and Health Care Utilization in Wisconsin,” prepared by Karen Holden, Thomas Kaplan, Elise Gould and Audra Wenzlow at the Institute for Research on Poverty, University of Wisconsin-Madison. Their analysis of the Family Health Survey was conducted under contract with the Wisconsin Department of Health and Family Services, Bureau of Health Information and funded by the State Planning Grant. This briefing paper was prepared by Catherine Frey.

The Wisconsin Family Health Survey (FHS) is a random sample telephone survey of Wisconsin households, designed to provide estimates of health care coverage, various health problems, and use of health care services by people across the state. The person in each sampled household who knows the most about the health of all household members is selected to answer all survey questions during the telephone interview. The FHS is directed by the Wisconsin

Department of Health and Family Services, Division of Health Care Financing, Bureau of Health Information.

The combined sample for 1998 and 1999, used for this analysis, was 12,928 individuals or 4,894 households. Data are weighted so that all results may be considered to be representative of Wisconsin’s household population. The FHS asks about each household member’s health insurance coverage over the year prior to the survey interview. Both private and public sources of insurance were included in the question. The response categories, also shown in Table 1, were:

- No insurance coverage during the last 12 months;
- Insured part of the last 12 months and uninsured part of that time;
- Insured for the entire 12-month period.

To obtain a copy of the Wisconsin Family Health Survey annual report:
Visit the Department of Health and Family Services web site at:
<http://www.dhfs.state.wi.us/stats/index.htm>

Or Contact:

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